DOCUMENT RESUME

ED 111 317 HE 006 800

AUTHOR Holmstrom, Engin Inel, Ed.

TITLE The Labor Market for Collage Graduates.

INSTITUTION American Council on Education, Washington, D.C.

Policy Analysis Service.

PUB DATE Jun 75

NOTE 26p.; Report of a Seminar sponsored by the Policy

Analysis Service, American Council on Education

(Washington, D. C., 1974)

AVAILABLE FROM Policy Analysis Service, American Council on

Education, One Dupont Circle, Washington, D. C.

20036

JOURNAL CIT Policy Analysis Service Reports: v1 n4 Jun75

EDRS PRICE MF-\$0.76 HC-\$1.95 Plus Postage

DESCRIPTORS *College Graduates; Conference Reports; Employment Opportunities; *Employment Projections; Employment

Trends: Financial Support: Graduate Study: *Higher

Education; *Labor Market; Manpower Needs;

Occupational Surveys; *Student Loan Programs;

Symposia

ABSTRACT

During the spring of 1974 a series of seminars on student aid programs and student access were held in connection with the congressional hearings on Title IV of the Higher Education Act. The final seminar in the series focused on the labor market predictions and conditions facing college graduates. The presentations reported on four major areas; (1) employment projections; (2) educational program planning; (3) graduate programs and needs in a tight labor market; and (4) affirmative action in a tight labor market. A follow-up seminar is recommended to deal with three additional topics: the use of manpower projections; dissemination of employment and enrollment information; and education for contingency. (LBH)



US OEPARTMENT OF HEALTH,
EOUCATION & WELFARE
NATIONAL INSTITUTE OF
EOUCATION
THIS DOCUMENT HAS BEEN REPRO
OUCED EXACTLY AS RECEIVLD FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT POINTS OF VIEW OR OPINIONS
JATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

REPORT OF A SEMINAR HELD SEPTEMBER 12, 1974 Sponsored by POLICY ANALYSIS SERVICE of the AMERICAN COUNCIL ON EDUCATION

POLICY ANALYSIS SERVICE REPORTS Vol. 1, No. 4 **June 1975**



THE LABOR MARKET FOR COLLEGE GRADUATES

Report of A Seminar

Sponsored by

Policy Analysis Service

of the

American Council on Education

Edited by Engin Inel Holmstrom

Policy Analysis Service Reports Vol. 1, No. 4, June 1975

American Council on Education Washington, D.C. 20036



AMERICAN COUNCIL ON EDUCATION

Roger W. Heyns, President

The American Council on Education, founded in 1918 and composed of institutions of higher education and national and regional associations, is the nation's major coordinating body for postsecondary education. Through voluntary and cooperative action, the Council provides comprehensive leadership for improving educational standards, policies, and procedures.

POLICY ANALYSIS SERVICE STAFF

John F. Hughes, Director

Engin I. Holmstrom Policy Associate

Donna Phillips Annual Meeting Coordinator

Patricia Smith Policy Associate Constance J. Falwell

Secretary

Carol Van Alstyne Chief Economist Ida E. Green Secretary

Catherine Henderson Research Analyst

Mel Kelley Secretary

Additional copies of this report are available from the Policy Analysis Service, American Council on Education, One Dupont Circle, Washington, D.C. 20036.



PREFACE

The Policy Analysis Service of the American Council on Education was created to give the Council increased ability to respond to public policy issues in higher education. The PAS prepares analyses of governmental actions, national social and economic developments, and trends in institutions of higher education; in addition, it provides information to ACE member institutions and associations. A major activity with respect to issues of national policy is the convening of seminars and meetings to bring together representatives of congressional committees, the executive branch, state governments, institutions, and educational associations. Reports of meetings, analytic reports, and briefing papers appear in the Policy Analysis Service Reports made available to the membership.

During the spring 1974 a series of seminars on student aid programs and student access were held in connection with the congressional hearings on Title IV of the Higher Education Act. The final seminar in the series focused on the labor market predictions and conditions facing college graduates. The report was prepared by Engin Inel Holmstrom, based on seminar notes taken by Marybeth Robb. Its final form owes much to the editorial expertise provided by Laura Kent.

The PAS hopes that readers will find the Reports series informative and will communicate comments or questions to the PAS staff.

John F. Hughes Director Policy Analysis Service



PRESENTATIONS

PANEL I - EMPLOYMENT PROJECTIONS

T. Edward Hollander, Deputy Commissioner for Higher and Professional Education, State Department of Education for New York

Leonard Lecht, Co-Director for Special Projects, National Industrial Conference Board

Frank Newman, President, University of Rhode Island

Michael Pilot, Labor Economist, Bureau of Labor Statistics

Norman Harris, Professor of Higher Education and Vocational Technical Education, University of Michigan

PANEL II - EDUCATIONAL PROGRAM PLANNING

Philip Austin, Acting Deputy Assistant to the Secretary for Education

James Kelly, Executive Vice Chancellor, State University of New York

Lyman Glenny, Director, Center for Research and Development in Higher Education, University of California

PANEL III - GRADUATE PROGRAMS AND NEEDS IN A TIGHT LABOR MARKET

Lattie Coor, Vice Chancellor, Washington University (St. Louis)

Charles Falk, Director, Division of Science Resources Studies, National Science Foundation

Allan Cartter, Professor of Education, University of California, Los Angeles

PANEL IV - AFFIRMATIVE ACTION IN A TIGHT LABOR MARKET

William M. Boyd II, President, A Better Chance, Inc. (Boston)

Mary Jo Small, Vice President for Administrative Services, University of Iowa



6

REPORT ON ACE/PAS SEMINAR: THE LABOR MARKET FOR COLLEGE GRADUATES September 12, 1974

In the last few years, the once-assured economic value of a college degree has increasingly been called into question. Reporting on the findings of a survey conducted by the New York Board of Trade, Michael Stern in the New York Times painted a gloomy picture of recent college graduates competing with high school dropouts and welfare recipients for a shrinking number of low-paying entry-level jobs. $\frac{1}{2}$ A recent study showed that the earnings gap between college and high school graduates was reduced by 31 percent between 1970 and 1972.2/ College graduates still have a somewhat easier time than the less educated in finding employment. According to the Bureau of Labor Statistics, in March 1974, the unemployment rate was 5.3 percent nationally, 4.8 percent for high school graduates, 9.6 percent for people with one to three years of high school, but only 1.9 percent for college graduates; these statistics cover all age groups. The situation is worse for recent college graduates; the unemployment rate of 20-24-year-old baccalaureate-holders was reported to be 4.2 percent as of March 1974. $\frac{3}{}$ Clearly, entry into the labor market is becoming steadily more difficult for young college graduates -- a finding which is hardly surprising in view of the following trends.

First, the scarcity of professional workers and the high demand for college graduates that characterized the 1960s was reversed by the unprecedented increase in the numbers of persons receiving college and graduate degrees during the decade. The



number of bachelor's and first-professional degrees conferred increased by 120 percent: from 417,846 in 1961-62 to 921,000 in 1971-72. The number of master's degrees conferred increased by 180 percent and the number of doctorates by 187 percent. 4/

During the same decade, the job market tightened, federal expenditures for research and development were sharply curtailed, and the long-term shortage of elementary and secondary school teachers finally came to an end. As the number of persons graduating from college continued to grow and the economic situation to worsen, employment prospects for all college graduates, but particularly those only recently graduated, were bound to be adversely affected. Moreover, since 1970-71, almost one million students have graduated with bachelor's and first professional degrees, and just over another million are expected to graduate during the 1974-75 academic year. With the deepening recession, and with the influx of new workers outpacing the growth of new jobs, college graduates are indeed facing harder times; they will have to cope with underemple, ment and job dissatisfaction, if not unemployment. Moreover, in the period 1972-85, 15.3 million college graduates are expected to enter the labor force--about 800,000 more than projected job openings -- although the oversupply will not be heavily felt until $1980.\frac{5}{}$

Concerned over this dismal prognostication, the Policy
Analysis Service of the American Council on Education sponsored
a full-day seminar on September 12, 1974, to consider the topic
"The Labor Market for College Graduates." Chaired by



Stephen K. Bailey, vice-president of ACE, the seminar comprised four panels. The first panel dealt with the validity of employment projections; the second, with educational program planning; the third, graduate programs and labor market needs, and the fourth, the impact of affirmative action in a tight labor market. This report summarizes the major points discussed and raises some questions that need instant answers; further, an introduction, a conclusion, and, at several points in the report, review or commentary (in italics) have been added.

Panel I - Employment Projections

Three of the five panelists each treated a different aspect of the same major theme: the problems inherent in using employment projections as a basis for educational program planning.

T. Edward Hollander, Deputy Commissioner for Higher and Professional Education, State Department of Education for New York, focused on the weaknesses of the four assumptions that underlie curriculum planning based on labor market projections rather than on student demand.

First, it is assumed that the educational planner has a clearer vision of the future than do the students. In fact, the factors influencing the job market are too complex and erratic for anyone to grasp completely and so plan accordingly. The second questionable assumption is that the educational planner has a mechanism for shifting the allocation of educational resources to meet changing labor market demands. In many cases, it is nearly impossible to phase out a well-entrenched program. Third, the assumption that employment oppor-



tunities are independent of the size and scope of educational programs is false; educational programs inevitably influence the job market: e.g., the latest crop of graduates in history could not be absorbed by academe, and the result was that many job opportunities for history majors opened up outs_de academe. The fourth erroneous assumption is that career levels are established independent of federal or state policy. The reverse is true: educational programs are affected by government policies regulating career levels: e.g., the State of New York's master's degree requirement for permanent teaching certification. In conclusion, student choice or demand should be allowed to be the barometer for program planning; it is fruitless to try to relate educational programs directly to the job market except in certain areas of narrow specialization.

Leonard Lecht, Co-Director for Special Projects, National Industrial Conference Board, argued that employment projections can be useful and even essential tools in developing educational policies as long as they are treated cautiously as broad quidelines and not as absolutes. Educational program planning based on employment projections is bound to be short-lived and quickly outmoded, since projections can change drastically within a decade. One factor accounting for the ephemeral nature of employment is change in national priorities as reflected in federal spending. In the early 1960s, when the federal government allocated \$5 billion for research and development in space programs, curriculum planning was heavily influenced by the projected shortage of scientists; in the 1970s, the \$2 billion



10

drop in R & D spending led to projections of an oversupply of scientists and concomitant revisions in curriculum planning.

Now, with the growing national interest in pollution control and energy conservation and production—and with talk of federal expenditures of \$20 billion for research and development in these areas—the emphasis is once again on the need for more scientists and engineers. It is to be hoped that the mistakes of the 1960s will not be repeated.

Employment projections can also prove to be erroneous because they are generally predicated on dubious assumptions regarding birth rates or growth of the GNP, which are affected by complex and not necessarily predictable factors.

The cylical nature of the interaction between employment and scientific and engineering enrollments is worth noting. John Walsh, in a recent article in <u>SCIENCE</u> states that this cyclical pattern "produces shortages of these professionals at a time when demand has recovered. This spurs enrollment and these graduates in turn emerge in time to be the next crop of superfluous scientists and engineers. The experience of geologists—who years ago were a glut on the market and are now at a premium—is like a bad parody of manpower planning. . . . Those concerned with professional manpower [are] faced with chronic problems—problems such as gathering adequate data, and more difficult and more important, modifying the Pavlovian responses which alternately generate too many and too few scientists for jobs available."6/

Frank Newman, President of the University of Rhode Island, made the point about inability to gear educational training to anticipate demand. He remarked that no country attempting to maintain a balance between supply and demand has ever achieved that objective satisfactorily: Both Sweden and the U.S.S.R are examples of nations that have failed in their efforts to regulate supply flows.

The Newman Task Force came up with truisms to explain the



imbalances in the situation with respect to professional manpower. First, a nation can more easily expand the number of its
college graduates and programs than it can expand the number of
positions traditionally defined as college-graduate jobs. The
trend toward more education is simply not matched by a corresponding growth in the number of the job openings requiring
college educated persons.

Second, those who fail to find a job do not simply vanish; they look for compatible jobs in other areas. For instance, because of the decrease in teaching jobs, women are now over-crowding nursing schools and the nursing profession itself. Thus, the problem of oversupply in one area tends to spread to other areas that require a college degree and to swell the number of college graduates in such occupational categories as "clerical," "sales," and "other services."

The Bureau of Labor Statistics employment projections tend to underestimate the oversupply because they ignore these "truisms." Further, Bureau of Labor Statistics data tend to underestimate the growth in postsecondary education that derives from the increasing enrollments of women, minorities, and older students returning to college and from the spread of postsecondary education outside colleges and universities.

It seems reasonable to predict that the rate of underemployment among college graduates will increase and that the emphasis in criteria for hiring will shift from educational credentials to performance. This shift may prove to be a more effective way of handling the problem of oversupply than the



imposition of artificial government restrictions or the upgrading of positions to match increases in the number of college graduates. Further, allowing the federal government to assume responsibility for educational planning is potentially dangerous; inasmuch as political considerations may easily outweigh considerations of the national welfare, the most rational system is to leave the choice to students. Moreover, oversupply is more equitable than federal manipulation of choice: That is, it is better to have people moving downward on the socioeconomic scale because of lack of motivation or ability than it is to deny them the opportunity for social mobility because of socioeconomic restraints.

A balance in manpower supply and demand requires some planning and manipulation. Although it may be more equitable to let the students make their own choices, the federal government should perhaps assume responsibility for making students more aware of manpower needs and appropriate training opportunities.

Michael Pilot, Labor Economist with the Bureau of Labor

Statistics, presented employment projections which showed that
the supply of college graduates would equal the demand for services between 1972 and 1980 and exceed the demand by as much as
10 percent between 1980 and 1985.

These projections of oversupply in 1980-85 may not materialize, however, if the present trend of decreasing enrollments continues. Moreover, since college graduates seem to have an advantage over nongraduates in getting most jobs, the problems



8

in the next decade will probably arise from underemployment and job dissatisfaction rather than from unemployment.

The last panelist, Norman Harris, Professor of Higher

Education and Vocational Technical Education at the University

of Michigan, sounded a positive note in his discussion of re
cent changes in national priorities and their possible impact

on the supply of college graduates.

Federal efforts to meet the energy and the food crises will require many new scientists and technologists, creating a resurgence of demand for college graduates in these currently depressed fields. Although the push for improved environmental protection has been temporarily slowed down by fear of recession, ultimately, the need for broad new educational curricula to solve environmental problems will be recognized and met.

In the discussion that followed, it was clear that many people did not share Harris'relatively optimistic outlook.

For instance, Charles Falk, of the National Science Foundation, stated that even if all our hopes related to energy development materialize with full federal funding, the result would be a 5 percent job increase spread over the next 15 years—a very small increment. Moreover, federal funds for the energy area will not be new funds but will be taken from other areas, causing further problems.

It was also pointed out, however, that the U.S. economy is resilient and able to absorb oversupplies of trained persons rather well.

The discussion then focused on job interchangeability and



on the kind of job-relevant training students get in college. It was agreed that the training received by lawyers and engineers gives them employment flexibilities not enjoyed by other college graduates, particularly those trained in areas where artificial job restrictions have been erected (e.g., health fields). Obviously, educational programming and its relation to job interchangeability loomed large as a major issue in the minds of many of the seminar participants.

Panel II - Educational Program Planning

Philip Austin, Acting Deputy Assistant to the Secretary
for Education, started off the second session with a brief
description of recent federal thinking on higher education and,
more specifically, of the basic assumptions underlying the
emphasis on student assistance programs.

The major goal of current federal support is to equalize opportunity for postsecondary education. To achieve this goal, it is assumed that families will be responsible for contributing financially to the education of their children, while the states will assume responsibility for maintaining the structure of institutions of higher education. The federal government's responsibility lies in assuring, through student assistance programs, that no qualified student is barred from pursuing higher education because of lack of financial resources.

Further, the federal government tries to ensure that the student is given not only the opportunity to go to college but also the opportunity to go to the college of his choice. The federal government recognizes, and is concerned about, the plight of



middle-income families and the survival of private colleges.

James Kelly, Executive Vice Chancellor of SUNY, described his experience as a state educational planner and lamented the dearth of areawide planning among institutions of higher education, although New York State has made tremendous progress toward the planning of its higher education over the last 15 years. In most areas, however, the financial crisis and predictions of declining enrollments have led to a shift in emphasis from educational planning to "institutional survivorship"; instead of trying to serve national needs, institutions are competing with one another. Such an attitude interferes with statewide planning.

Lyman Glenny, Director of the Center for Research and
Development in Higher Education, University of California at
Berkeley, said that higher education must maintain flexibility
and must learn to "educate for contingency" so that students
can adapt to new occupations in a future which cannot now be
foreseen. Good educational planning is continuous; is subject
to change as society, values, and aspirations change; and is
subject to review. Higher education must avoid the trap of
assuming that we know what the nation's future manpower needs
will be. Master plans built around such predictions will almost
certainly fail. Nevertheless, it is necessary to establish
national priorities and to give widespread publicity to speculations on the future of all aspects of society and of postsecondary education. Perhaps a national organization such as
the American Council on Education or the Office of Education



should work toward setting national priorities for postsecondary education and should take responsibility for making them known to the public. Moreover, faculty members, administrators, and policy-makers all need to get deeply involved in the development of these priorities.

Certain improvements are also needed at the state level. A recent study of budgeting practices in 17 states showed that except in the area of special studies, particularly in the health fields, there is very little comprehensive planning at the state level. State governors and legislators, though concerned, are particularly sympathetic with the lack of focus and direction in higher educ. Lion; they see institutions as more interested in their own survival than in education of students. Further, even in those states that do plan for their educational needs, consideration is seldom given to the programs and planning of other states--a practice that may be workable for the large industrial states but tends to be disastrous to program quality in the smaller ones. It is imperative that more information and more analyses of national trends be delivered to the states and that states draw upon a larger and more representative constituency in their planning for higher education.

At the present, most educational program planning is done by faculty members, who appear to be guided chiefly by their own interests, by changes in their own disciplinary fields signaling nuances for the future, and by student demand. They listen to employment projections, but they are basically less than sensitive to societal needs. Planning by faculty could be much



improved if the information base were improved: Ideally, the process of educational planning should start with a review of national priorities at the federal level, move on to a review of national goals by the states, and then to the setting of state goals; finally, information should get down to faculty members through the institutions. Only through such a system of educational planning can higher education develop broad-core programs that permit students to move into different jobs in response to the needs of a changing society.

The discussion following the second panel centered on Bailey's question about the extent to which market assumptions guide educational planning. According to Austin, centers are needed to bring the business world and the educational world together so that the relevance of educational programming would be increased—although, of course, the sole purpose of higher education is not to provide bodies for the labor market. This point led to a discussion of the purpose of higher education and the value of a liberal arts education as compared with that of occupational education. Should education be highly targeted or broadly based? Do we "educate for contingency"? Most seminar participants agreed that a greater emphasis on general education is needed.

Roger Heyns, President of the American Council on Education, suggested that our next step should be toward increasing the awareness that institutional survival can be maintained only within the larger context of national priorities. We need also to evaluate and publicize the noneconomic intentions of



education as well as to identify and examine the factors that limit flexibility in employment. He pointed out, that in our value system, changing jobs is frowned upon; this attitude reinforces training that does not permit job flexibility. Specialization does not need to be tied to content; tools, discipline, and skills should be—and are—generalizable.

Thus, in the morning session, the following major points emerged. First, employment and enrollment projections are hazardous if taken too seriously in educational program planning; concerted and intensive efforts should be made to upgrade the quality of these projections. Second, educational program planning should respond to student demand, and the influence of the federal government, state governments, and institutions should work together in setting and disseminating national priorities, and educational planning should reflect these priorities as well as the needs of the students. Finally, given the current situation in this country, the market value of a college degree—and of education itself—is open to question; we must give greater consideration to the problem of how to "educate for contingency."

Panel III - Graduate Programs and Needs in a Tight Labor Market

There was general agreement in the session that the growth rates of graduate enrollments can be expected to slow down. The first panelist addressed himself to the type of educational planning needed to deal with decreases in enrollments, whereas the other two panelists discussed the factors leading to the slowdown in graduate enrollments and the broader implications of this slowdown in relation to potential labor market demands.

Lattie Coor, Vice-Chancellor of Washington University

(St. Louis), started with the premise that graduate education is undergoing a fundamental change. According to recent projections for the 1980-90 period, the shift away from such graduate fields as foreign language, physics, and mathematics and toward professional training will intensify.



In response to these new program demands, it is more economical and feasible to think in terms of a concept of adaptation primarily of existing programs to new requirements. Advantages of the concept of adaptation include the recognition that institutional and faculty desire to remain vital are susceptible to reasoned shifts to adapt to new conditions and variations in instructional training. The basic premises of concept of adaptations are: (a) entirely new programs to meet new labor market needs are very costly to construct, and, even more difficult to phase out, and given the evanescent nature of some market place demands, represent a very ineffective way of responding; (b) there is great virtue in keeping basic disciplines intact, adapting them to new needs as required, phasing out the adaptation as needs shift. Further, retaining established basic disciplines has the advantage of maintaining an intrinsic quality control; (c) concept of adaptation fits institutional reality by tying the force for changing patterns of training into the existing forces, and into the faculty, where the real influence on student choice, program offered, and type of placement sought lies; (d) in the uncertain years ahead, it is better to underbuild than overbuild for graduate education. The elasticity of current programs to accommodate larger numbers of students is high. The concept of adaptation offers protection against overbuilding.

The implementation of such an approach requires the institution to set up internal information system and policy interaction so that those faculty members and departments where



adaptation appears most likely can be informed of prospects ahead and can participate in solutions to prospective shifts. Further, it is necessary for the federal government to lace mission-oriented grants and contracts with adaptive supports, to provide adequate merit fellowships and cost-of-education allowances, and to assist in maintaining stability in funding so adaptive programming can take place in a systematic and rational way.

Charles Falk, Director for the Division of Science Resources
Studies, National Science Foundation, spoke about the projected
changes in the science and engineering component of graduate
education and outlined four trends which will have major effects
on graduate enrollments and program planning:

- 1. The decline in the population of 18-year-olds, which will affect graduate schools by the late 1970s and doctoral institutions by the late 1980s.
- 2. The decline in the propensity of 18-year-olds to enter college, which will probably continue for another 10-15 years.
- 3. The decline in the propensity of college graduates to go to graduate schools, which started in 1966 and is expected to hit the graduate schools most severely in the mid-1980s, at which time the full-time enrollment of first-year graduate students in science and engineering may go down by as much as 25 percent.
- 4. The decline in the propensity of graduate students to go on for the doctorate, which will result in a 10 percent decrease in Ph.D. production by 1985.

Graduate program planners face two challenges in the period 1974-85. The first is the contraction of graduate enrollments; graduate schools must absorb this decline and still survive.

The second challenge relates to the nature of graduate training;



there is an imbalance between Ph.D. production and the availability of traditional jobs for Ph.Ds in the labor market.

Currently, about 6-7 percent of science and engineering doctorates are employed in nonscience fields. Although today such employment patterns may represent the choice of the individual, in the future it is likely to be involuntary in that by 1985 as many as 30 percent of the doctorates in science and engineering may be engaged in nonacademic, non-R & D activities. Among the new doctorates, the proportion of those employed in nonscience fields may be as high as 45 percent.

Allan Cartter, Professor of Education, University of California at Los Angeles, also talked about projections of doctoral Although more women and minorities are now enrolled in graduate training, doctoral manpower projections are generally down for the period 1972-82. These graduate enrollment projections are based on three conditions: (1) past and present trends in graduate enrollment, (2) past and anticipated R & D expenditures, and (3) actual or projected new openings for faculty. Comparing two projection models (the fixed coefficients vs. the recessive market), we can make the following inferences about the prospects of Ph.D.-holders. First, though junior colleges will grow more rapidly than four-year institutions, Ph.D.s will be hired more in the four-year colleges. Second, if the growth in higher education occurs in nondegree programs, the market for Ph.D.s will be adversely affected; but if the growth occurs in traditional programs, the market for Ph.D.s will be positively affected. It should also be noted that faculty mobility among



institutions of higher education is coming to an end. In conclusion, graduate institutions should put a premium on flexibility in their programming and provide a wide freedom of choice to their students.

Panel IV - Affirmative Action in a Tight Labor Market

William M. Boyd II, President of A Better Chance, Inc.

(Boston) said that affirmative action is important to the society but is especially important to higher education. He suggested that two kinds of people resist affirmative action in higher education: the misinformed and the bigoted. The misinformed tend to forget how non-meritocratic personnel policies have always been: e.g., the "best" candidates are not objectively or scientifically identified and chosen. When these people have been enlightened about the process, they may stop resisting affirmative action and even support it. In his view, the group of bigots in higher education is smaller but harder to deal with: It may not be possible to persuade people in this group to support affirmative action, but an effort should be made to convince them or to expose their bigotry.

Boyd then listed strategies frequently used to resist affirmative action and suggested that a tight labor market creates pressures that further impede affirmative action goals. Therefore it must be kept in mind that the implementation of affirmative action will meet with some degree of resistance and unfavorable publicity. In these circumstances, what is needed in the affirmative action process is a more open, honest, and clearly defined approach. There remains, in any event, various



problems in developing objectives and identifying valid and reliable measures of racial and sex discrimination.

The second panel member, Mary Jo Small, Vice-President for Administrative Services, University of Iowa, addressed the issue of affirmative action from the perspective of an employer and listed some of the problems involved in meeting government regulations.

Conclusion

The day-long seminar, and the reactions to it, suggest, that there should be a follow up seminar to pursue the following topics.

1. The Use of Manpower Projections. How can manpower projections be upgraded? What are the assumptions used in current planning models? Can we develop new occupational clusters that reflect grouping of occupations that demand highly similar or overlapping sets of skills, experience, and general knowledge? How can occupational categories be linked with educational requirements? What applications of manpower projections are appropriate for educational planning?

The questions raised in the seminar make it clear that further discussion of the methodology of employment and enrollment projections would be useful. Particular attention should be paid to the difficulty of developing independent projections of supply and demand.

- 2. Dissemination of Employment and Enrollment Information. How can we improve our system for giving information about job opportunities (in the nation as a whole as well as within specific regions) to students, state planners, and institutional faculty and staff? How can we ensure that students are fully aware of manpower needs and of training opportunities? Is it feasible for a Washington-based education association to assume responsibility for sensitizing institutions and state planners to the need to be more attentive to national and regional manpower needs?
- 3. Education for Contingency. The shrinking labor market and



the intensifying competition for jobs among college graduates have raised serious questions about the value of a college degree. Nevertheless, a recent survey showed that the majority of noncollege yough perceived lack of a college degree to be a major reason for their inability to find interesting and satisfying work. 7/ Another recent survey indicated that some of the young people who preferred a short vocational training program in a proprietary school to a longer training period in a public two-year college were proven to be dead wrong in thier assumption that the proprietary schools would be more successful in job placement than would the more academically oriented two-year college.8/

The time has come, then, for higher education to initiate discussions with representatives of proprietary schools and of industry so that together they can assess how to train students in skills and general knowledge adaptable to the requirements of a variety of job situations.



References

Michael Stern, "College Graduates Vying with Poor for Jobs Here,"

New York Times, 20 November, 1974.

In 1970, the average high school graduate who had not attended college and who was between the ages of 25 and 34 had an annual income of \$8,377 as compared with \$11,133 for the average college graduate in the same age braket. The income differential in 1970 was \$2,756. In 1972, the high school graduate earned \$9,451 while the col graduate earned \$11,533; the income differential in 1972 was reduced to \$2,102, probably because of the effectiveness of unionization: Stanley Noland, The Supply and Demand for College Educated Labor (unpublished Ph.D. Dissertation, University of Chicago, December, 1974).

³Bureau of Labor Statistics, telephone communication.

W. Vance Grant and C. George Lind, Digest of Educational Statistics, 1973 edition (Washington: U. S. Government Printing Office, 1974). Table 114, p. 100.

⁵Bureau of Labor Statistics, <u>Occupational Manpower and Training Needs</u>, Revised 1974 (Washington: U. S. Governmen's Printing Office, 1974), p. 26.

⁶John Walsh, "Scientific Manpower Employment: So Far, It Seems To Be Holding Up," <u>Science</u>, 6 December 1974, pp. 901-3.

⁷Daniel Yankelovich and Associates, <u>The New Morality</u> (New York: McGraw-Hill Book Co., 1974).

Wellford W. Wilms, <u>The Effectiveness of Public and Proprietary</u>

Occupational <u>Training</u> (Berkeley: Center for Research and Development in Higher Education, University of California, 1974).

